## **EAST Search History**

## **EAST Search History (Prior Art)**

Ref#	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	8128	(free and (pinned or pinning or fixed or fixing)) adj layer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/07/14 16:14
L2	16	("5463516" "5773156" "2002043974" "2002190713" "2001028872" "6353317" "6103406" "2002114974").pn.	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2010/07/14 16:14
L3	1	L2 L1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/07/14 16:14
L4	254	((BRUNETTO) near2 (MARTORANA)).INV. ((DANIELE) near2 (PULLINI)).INV. ((PIERO) near2 (PERLO)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/07/14 16:14
L5	9169	spin?valve or (spin adj valve)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/07/14 16:20
L6	8128	(free and (pinned or pinning or fixed or fixing)) adj layer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/07/14 16:20
L7	4231	L5 L6	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/07/14 16:20
L8	255	(nano?porous or nanoporous) magnet\$3 tunnel\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2010/07/14 16:20

L9	27	L8( (free ) same (pin\$3 or fix\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2010/07/14 16:20
L10	418	((nano adj (porous or pore)) or nano\$por\$3 or nanopor\$3) magnet \$3 tunnel\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2010/07/14 16:20
L11	41	L10 ( (free ) same (pin \$3 or fix\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2010/07/14 16:20
L12	14	L11 not L9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2010/07/14 16:20
L13	9961	porous adj silicon	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/07/14 16:21
L14	2576175	ferromagnet\$3 or ferro \$magnet\$3 or magnet \$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/07/14 16:21
L15	307	tunnel\$3 L13 L14	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/07/14 16:21
L16	9169	spin?valve or (spin adj valve)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/07/14 16:21
L17	8128	(free and (pinned or pinning or fixed or fixing)) adj layer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/07/14 16:21

L18	4231	L16 L17	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/07/14 16:21
L19	857	tunnel\$3 L13	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/07/14 16:21
L20	27	L8 ( (free ) same (pin \$3 or fix\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2010/07/14 16:21
L21	6827	(257/002 257/421 257/422 257/423 257/424 257/425 257/426 257/427 360/324.2 438/900 365/158 257/003 257/004 257/005).ccls. (257/30 360/324.1 365/158).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/07/14 16:21
L22	38	(US-20060102969-\$ or US-20060128038-\$ or US-20060180839-\$ or US-20060003185-\$ or US-20060012926-\$ or US-20060093862-\$ or US-20060021510-\$ or US-200600255383-\$ or US-200600255383-\$ or US-200600255383-\$ or US-20060093862-\$ or US-20060093862-\$ or US-20060012926-\$ or US-20060102969-\$ or US-20060128038-\$ or US-20060128038-\$ or US-2006018038-\$ or US-2006018039-\$ or US-2006018039-\$ or US-20040136232-\$ ).did. or (US-6097625-\$ or US-684(US-5565695-\$ or US-5432373-\$ or US-6297987-\$ or US-5515314-\$ or US-5515314-\$ or US-	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR		2010/07/14

		5652445-\$)". did.5038-"\$).did.				
L23	24	(US-20060102969-\$ or US-20060128038-\$ or US-20060180839-\$ or US-20060003185-\$ or US-20060012926-\$ or US-20060093862-\$ or US-20060021510-\$ or US-20060093862-\$ or US-20060098354-\$ or US-20060098354-\$ or US-20060098354-\$ or US-20060098354-\$ or US-20060098354-\$ or US-20060098354-\$ or US-20060012926-\$ or US-2006012926-\$ or US-2006012926-\$ or US-20060128038-\$ or US-20060128038-\$ or US-20060128038-\$ or US-200601385-\$ or US-200601385-\$ or US-20060136232-\$ ).did. or (US-6097625-\$ or US-684(US-5565695-\$ or US-684(US-5565695-\$ or US-5432373-\$ or US-5652445-\$)". did.5038-"\$).did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/07/14
L24	9682	(257/002 257/421 257/422 257/423 257/424 257/425 257/426 257/427 360/324.2 438/900 438/3 365/158 257/003 257/004 257/005).ccls. (257/30 360/324.1 365/158). CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/07/14 16:21
L25	3	nano?porous same tunnel\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/07/14 16:21
L26	365	nanoporous and tunnel \$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/07/14 16:21

S1	24	, .	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	2	2008/02/04
S	38	(US-20060102969-\$ or US-20060128038-\$ or US-20060180839-\$ or US-20060003185-\$ or US-20060012926-\$ or US-20060093862-\$ or US-200600255383-\$). did. (US-20060093862-\$ or US-20060093862-\$ or US-20060093862-\$ or US-20060093862-\$ or US-20060012926-\$ or US-2006012926-\$ or US-2006012926	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/04

		6297987-\$ or US- 5515314-\$ or US- 5652445-\$)". did.5038-"\$).did.				
S3	11343	antiferromagnet\$3 or antiferro\$magnet\$3 or anti\$ferromagnet\$3 or (anti adj ferro\$magnet \$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/04 11:10
S4	2153752	ferromagnet\$3 or ferro \$magnet\$3 or magnet \$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/04 11:10
S6	5542	(257/002 257/421 257/422 257/423 257/424 257/425 257/426 257/427 360/324.2 438/900 365/158 257/003 257/004 257/005).ccls. (257/30 360/324.1 365/158).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/05/23 13:31
S8	8120	(257/002 257/421 257/422 257/423 257/424 257/425 257/426 257/427 360/324.2 438/900 438/3 365/158 257/003 257/004 257/005).ccls. (257/30 360/324.1 365/158). CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/25 14:51
S9	2	"US 20060216836"	US-PGPUB; USPAT; USOCR; DERWENT	AND	ON	2008/08/25 14:51
S10	241	((BRUNETTO) near2 (MARTORANA)).INV. ((DANIELE) near2 (PULLINI)).INV. ((PIERO) near2 (PERLO)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	on the state of th	ON	2008/08/25 14:52
S11	16	("5463516" "5773156" "2002043974" "2002190713" "2001028872" "6353317" "6103406" "2002114974").pn.	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2008/08/25 16:07
S12	7921	spin?valve or (spin adj valve)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/25 16:11

S13	6212	(free and (pinned or pinning or fixed or fixing)) adj layer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/25 16:11
S14	3456	S12 S13	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2008/08/25 16:12
S15	7923	spin?valve or (spin adj valve)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/26 13:48
S16	6216	(free and (pinned or pinning or fixed or fixing)) adj layer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/26 13:48
S17	3458	S15 S16	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2008/08/26 13:48
S18	16	("5463516" "5773156" "2002043974" "2002190713" "2001028872" "6353317" "6103406" "2002114974").pn.	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2008/08/26 13:48
S19	241	((BRUNETTO) near2 (MARTORANA)).INV. ((DANIELE) near2 (PULLINI)).INV. ((PIERO) near2 (PERLO)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/26 13:48
S20	0	(nanoparticle nano? particle (nano adj particle) nanowire nano?wire (nano adj wire) nanotubes nano? tube (nano adj tube)) and S17	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2008/08/26 13:50
S21	64	(nanoparticle nano? particle (nano adj particle) nanowire nano?wire (nano adj wire) nanotubes nano? tube (nano adj tube)) and S17	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/26 13:50

S22	1	S18 S16	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2008/08/26 17:01
S23	24	,	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/25
S24	838 	(US-20060102969-\$ or US-20060128038-\$ or US-20060180839-\$ or US-20060003185-\$ or US-20060012926-\$ or US-20060098354-\$ or US-20060255383-\$). did. (US-20060098354-\$ or US-20060098354-\$ or US-20060098354-\$ or US-20060098354-\$ or US-20060098354-\$ or US-20060012926-\$ or US-2006012926-\$ or US-20060128038-\$ or US-20060003185-	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/25 18:39

		\$ or US-20030179071- \$ or US-20060180839- \$ or US-20040136232- \$).did. or (US-6097625- \$ or US-6841395-\$ or US-684(US-5565695-\$ or US-5432373-\$ or US-6297987-\$ or US-5515314-\$ or US-5652445-\$)". did.5038-"\$).did.	mmannammannammannammannammannammannammannammannammannammannammannammannammannammannammannammannammannammannamm			
S25	13165	antiferromagnet\$3 or antiferro\$magnet\$3 or anti\$ferromagnet\$3 or (anti adj ferro\$magnet \$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/25 18:39
S26	2343469	ferromagnet\$3 or ferro \$magnet\$3 or magnet \$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/25 18:39
S27	6034	(257/002 257/421 257/422 257/423 257/424 257/425 257/426 257/427 360/324.2 438/900 365/158 257/003 257/004 257/005).ccls. (257/30 360/324.1 365/158).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/25 18:39
S28	8603	(257/002 257/421 257/422 257/423 257/424 257/425 257/426 257/427 360/324.2 438/900 438/3 365/158 257/003 257/004 257/005).ccls. (257/30 360/324.1 365/158). CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/25 18:39
S29	2	"US 20060216836"	US-PGPUB; USPAT; USOCR; DERWENT	AND	ON	2009/03/25 18:39
S30	249	((BRUNETTO) near2 (MARTORANA)).INV. ((DANIELE) near2 (PULLINI)).INV. ((PIERO) near2 (PERLO)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/25 18:39

S31	16	("5463516" "5773156" "2002043974" "2002190713" "2001028872" "6353317" "6103406" "2002114974").pn.	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2009/03/25 18:39
S32	8317	spin?valve or (spin adj valve)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/25 18:39
S33	6822	(free and (pinned or pinning or fixed or fixing)) adj layer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/25 18:39
S34	3717	S32 S33	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/25 18:39
S35	8317	spin?valve or (spin adj valve)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/25 18:39
S36	6822	(free and (pinned or pinning or fixed or fixing)) adj layer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/25 18:39
S37	3717	S35 S36	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/25 18:39
S38	16	("5463516" "5773156" "2002043974" "2002190713" "2001028872" "6353317" "6103406" "2002114974").pn.	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2009/03/25 18:39
S39	249	((BRUNETTO) near2 (MARTORANA)).INV. ((DANIELE) near2 (PULLINI)).INV. ((PIERO) near2 (PERLO)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/25 18:39

S40	0	(nanoparticle nano? particle (nano adj particle) nanowire nano?wire (nano adj wire) nanotubes nano? tube (nano adj tube)) and S37	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/25 18:39
S41	76	(nanoparticle nano? particle (nano adj particle) nanowire nano?wire (nano adj wire) nanotubes nano? tube (nano adj tube)) and S37	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/25 18:39
S42	1	S38 S36	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/25 18:39
S43	1	(US-20060216836-\$). did.	US-PGPUB	AND	ON	2009/03/25 19:49
S44	1	S43 spacer "113" "133"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/03/25 19:50
S45	284	nanoporous and tunnel \$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/09/08 16:28
S46	26	nanoporous same tunnel\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/09/08 16:28
S47	3	nano?porous same tunnel\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/09/08 16:31
S48	191	(nano?porous or nanoporous) magnet\$3 tunnel\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2009/09/08 16:31

S50	118	S48 (free ) and (pin\$3 or fix\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2009/09/08 16:32
S51	6	S48( (free ) same (pin \$3 or fix\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2009/09/08 16:32
S52	6	S48 ( (free ) same (pin \$3 or fix\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2009/09/08 16:32
S53	327	((nano adj (porous or pore)) or nano\$por\$3 or nanopor\$3) magnet \$3 tunnel\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2009/09/08 16:34
S54	19	S53 ( (free ) same (pin \$3 or fix\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2009/09/08 16:34
S55	13	S54 not S51	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2009/09/08 16:34
S57	327	((nano adj (porous or pore)) or nano\$por\$3 or nanopor\$3) magnet \$3 tunnel\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/09/08 16:35
S60	5119	(porous or pore) magnet\$3 tunnel\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/09/08 16:36

S61	1363	S60 ( (free ) same (pin \$3 or fix\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/09/08 16:36
S62	19	S57 ( (free ) same (pin \$3 or fix\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/09/08 16:36
S63	4	(porous or pore) (magnet\$3 same tunnel \$3) \$62	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/09/08 16:37
S65	28	magnet\$3 ((porous or pore) same tunnel\$3) S61	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/09/08 16:37
S66	118	(porous or pore) (magnet\$3 same tunnel \$3) S61	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2009/09/08 16:37
S67	253	((BRUNETTO) near2 (MARTORANA)).INV. ((DANIELE) near2 (PULLINI)).INV. ((PIERO) near2 (PERLO)).INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/03/24 18:28
S68	16	("5463516" "5773156" "2002043974" "2002190713" "2001028872" "6353317" "6103406" "2002114974").pn.	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2010/03/24 18:28
S69	8965	spin?valve or (spin adj valve)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/03/24 18:28
S70	7771	(free and (pinned or pinning or fixed or fixing)) adj layer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/03/24 18:28

S71	4097	S69 S70	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/03/24 18:28
S72	8965	spin?valve or (spin adj valve)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/03/24 18:28
S73	7771	(free and (pinned or pinning or fixed or fixing)) adj layer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/03/24 18:28
S74	4097	S72 S73	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/03/24 18:28
S75	9382	(257/002 257/421 257/422 257/423 257/424 257/425 257/426 257/427 360/324.2 438/900 438/3 365/158 257/003 257/004 257/005).ccls. (257/30 360/324.1 365/158). CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/03/24 18:28
S76	5475	(porous or pore) magnet\$3 tunnel\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/03/24 18:29
S77	1428	S76 ( (free ) same (pin \$3 or fix\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/03/24 18:29
S78	29	magnet\$3 ((porous or pore) same tunnel\$3) S77	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/03/24 18:29

S79	29	magnet\$3 ((porous or pore) same tunnel\$3) S77	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/03/24 18:29
S80	217	(nano?porous or nanoporous) magnet\$3 tunnel\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2010/03/24 18:29
S81	13	S80( (free ) same (pin \$3 or fix\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2010/03/24 18:29
S82	370	((nano adj (porous or pore)) or nano\$por\$3 or nanopor\$3) magnet \$3 tunnel\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2010/03/24 18:29
S83	26	S82 ( (free ) same (pin \$3 or fix\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2010/03/24 18:29
S84	13	S83 not S81	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2010/03/24 18:29
S85	34687	(porous or pore) with silicon	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/03/24 18:30
S86	9970	(porous or pore) adj silicon	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/03/24 18:30

S87	9691	porous adj silicon	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/03/24 18:30
S88	821	tunnel\$3 S87	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/03/24 18:30
S89	2516254	ferromagnet\$3 or ferro \$magnet\$3 or magnet \$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/03/24 18:31
S90	289	tunnel\$3 S87 S89	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/03/24 18:31
S91	3	((nano?porous or nanoporous) adj silicon) magnet\$3 tunnel\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2010/03/24 18:32

## **EAST Search History (Interference)**

Ref#	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L27	6342	(free and (pinned or pinning or fixed or fixing)) adj layer	US-PGPUB; USPAT; UPAD	OR	ON	2010/07/14 16:42
L28	416	((nano adj (porous or pore)) or nano\$por\$3 or nanopor\$3) magnet\$3 tunnel\$3	US-PGPUB; USPAT; UPAD	AND	OFF	2010/07/14 16:42
L29	7253	spin?valve or (spin adj valve)	US-PGPUB; USPAT; UPAD	OR	ON	2010/07/14 16:42
L30	6342	(free and (pinned or pinning or fixed or fixing)) adj layer	US-PGPUB; USPAT; UPAD	AND	ON	2010/07/14 16:43
L31	7253	spin?valve or (spin adj valve)	US-PGPUB; USPAT; UPAD	AND	ON	2010/07/14 16:43

L32	0	(free ((pinned or pinning or fixed or fixing) adj layer ) (spin?valve or (spin adj valve)) ((nano adj (porous or pore)) or nano\$por\$3 or nanopor\$3) magnet \$3 tunnel\$3 ).clm.	US-PGPUB; USPAT; UPAD	AND	ON	2010/07/14 16:46
L33	9025	(257/002 257/421 257/422 257/423 257/424 257/425 257/426 257/427 360/324.2 438/900 438/3 365/158 257/003 257/004 257/005).cds. (257/30 360/324.1 365/158).CCLS.	US-PGPUB; USPAT; UPAD	OR	ON	2010/07/14 16:46
L34	0	(free ((pinned or pinning or fixed or fixing) layer ) (spin? valve or (spin adj valve)) ((nano adj (porous or pore)) or nano\$por\$3 or nanopor\$3) magnet \$3 tunnel\$3 ).clm.	US-PGPUB; USPAT; UPAD	AND	ON	2010/07/14 16:47

## 7/14/2010 4:47:31 PM

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